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NEW AMPHIBIA.

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MANY collections of Neotropical Amphibia have been received during recent years by the Museum of Comparative Zoölogy, and in these the following new species have appeared.

Gymnophis clarkii, sp. nov.

Type.—No. 11047, Museum of Comparative Zoölogy, from Tela, Honduras. Collected in June, 1925, by Dr. Herbert Clark.

Diagnosis.—The shortest and thickest species known. Only about seven anterior and five posterior rings without traces of secondary folds.

Description.—Diameter, 9 mm.; length, 145 mm.; ratio, 16. Complete rings, 105; the 5th ring shows a tendency to a dorsal cleft, and after an interval of the next few rings, well-developed secondary folds appear. These persist, dividing the primary rings dorsally and sometimes almost completely until about six segments from the posterior end of the animal, where they disappear. The vent is nearly terminal.

Color.—As usual, plumbeous.

Phyllomedusa nicefori, sp. nov.

Plate 12, fig. 1, 2.

Type.—No. 11611, Museum of Comparative Zoölogy, from Villavicencio,¹ Colombia. Collected by the Rev. Brother Nicéforo Maria and named for him.

Diagnosis.—This species belongs with those having the first toe longer than the second; having vomerine teeth; lacking parotoid glands; thus very similar to *P. coelestis*, from which it differs in having shorter legs and far less developed digital dilatations.

Description.—Vomerine teeth in two small but very distinct groups opposite the middle of the choanae; form elongate, size medium; snout longer than diameter of eye, sloping; loreal region likewise declivous; interorbital space broader than upper eyelid; tympanum about one-half diameter of eye; fingers entirely free, long, first slightly shorter than second; fourth nearly as long as third; first toe longer than second; discs of fingers and toes small; scarcely a trace of a metatarsal tubercle; the hind limb being carried forward along the body, the tibio-tarsal articulation reaches the anterior border of the eye; skin smooth above, granular beneath, with several large prominent tubercles on each side of the vent; no parotoid glands.

Color in alcohol.—Exactly similar to that of *P. coelestis*, blue (green in life) above, lower lip white, the white line extending completely around the forearm insertion and terminating as a cluster of white dots along the edge of the chest; several white sternal spots; throat and chest lavender, fading posteriorly to dirty white, which is the color of the lower belly and inside of limbs; a white glandular line separating the blue from the white along the back of the fore limbs, while on the hind limbs the blue fades into the light color, with several light spots along the boundary area. A few scattered white tubercles along

¹ A town on the Rio Meta in the tropical lowlands east of Bogotá; altitude, 452 meters.

the sides more abundant ventrad than dorsad, and the enlarged tubercles about the vent conspicuously white.

Measurements.—Total length, tip of snout to vent, 80 mm.; width of head, 24 mm.; length of fore limb, 50 mm.; length of hind limb, from vent to longest toe, 112 mm.

Bufo dunni, sp. nov.

Plate 13, fig. 1, 2.

Type.—No. 11076, Museum of Comparative Zoölogy, adult female; paratype, No. 11077, a male; also other paratypes (males and females) from Mina Carlota, near Cumanayagua, south central Cuba. The mine is in the Trinidad Mountains at an altitude of about 1200 feet. Collected in July, 1925, by Professor Emmett R. Dunn.

Diagnosis.—Related to Bufo longinasus Stejneger from Pinar del Rio, western Cuba, and to Bufo ramsdeni Barbour from near Guantanamo. It differs from the former in having a less sharp snout, in being rougher dorsally and more spotted ventrally; the toes are also less completely webbed. From *B. ramsdeni* it differs in being smoother, less spotted below, and in having a sharper snout. It is like *ramsdeni* in having a concave crown, while *longinasus* has a flat head.

Description.—Female: head and body depressed; head concave and tubercular above; weak bony ridges along canthus; snout conical, pointed, projecting; nostrils very near tip of snout and close together; interorbital width greater than upper eyelid; tympanum invisible in type (distinguishable in the male); first finger shorter than second; tips of fingers and toes very slightly swollen; toes about two-thirds or more webbed (rather more in the male); subarticular tubercles on fingers well developed, not so on toes; small inner and outer metatarsal tubercles; a very faint tarsal fold, really represented by an elongate tarsal tubercle; when the leg is stretched forward, the tibio-tarsal articulation reaches the insertion of the fore limb; skin above with many granular tubercles; parotoids large but indistinct, less developed by far than in *B. longinasus*, more as in *ramsdeni;* throat, belly, and thighs coarsely granulated.

Color.—Greenish dark bars on canthus, between eyes, at elbow, mid-forearm, and wrist, and also on the leg; a whitish spot on crown; a light vertebral line often present in the males.

Measurements.—Total length, tip of snout to vent, 36 mm.; width of head, 12 mm.; length of fore limb, 22.5 mm.; length of hind limb, from vent to longest toe, 43 mm.

Remarks.—Professor Dunn contributes the following field notes:

"I found the toads in or near streams above 1200 feet in the northern part of the Trinidad Mountains, viz. at La Mina and at a place called Los Tres Pilones, some two hours' riding toward the Siguanea Valley. They are strictly diurnal. The males call from the water's edge or from rocks in the water—a long waaa, long drawn out, faint, but resembling the call of *Bufo fowleri*. The toads were very conspicuous in the daytime. None were seen at night. I heard them most often about 10 o'clock in the morning. The females and young did not frequent the water as much as the males. The tadpoles, of which a number were taken, were strikingly black with two white rings, which, paradoxically enough, made them harder to see than if they were uniform black. I found no eggs.

"The color in life was largely green, white, and brown, rather gaudy. The species is very similar in both color and markings to young *Bufo peltacephalus*."

Eleutherodactylus persimilis, sp. nov.

Plate 14 (type, upper left-hand figure).

Type.—No. 11598, Museum of Comparative Zoölogy, from Suretka, Costa Rica, near the boundary of Bocas del Toro Province, Panamá. Collected July-August, 1923, by Professor E. R. Dunn and Mr. Chester B. Duryea. There are several paratypes, Nos. 11599–11610.

Diagnosis.—A very small representative of the *rhodopis* group which seems to differ from its many and puzzling allies in proportions and coloration. Body short and fat, limbs short and heavy.

Description.—Tongue round, large, unemarginate behind; vomerine teeth in two small round groups between the choanae, widely separated one from the other; nostrils very near tip of snout; upper eyelid much narrower than interorbital space; tympanum large, round, distinct, about two-thirds diameter of eye, its distance from latter about two-thirds its own diameter; no discs on fingers, very small expansions only of the tips of the toes; first finger shorter than second; first toe short, only reaching subarticular tubercle of the second; subarticular tubercles on fingers and toes very well developed; two welldeveloped metatarsal tubercles; many small plantar tubercles; a moderately developed tarsal fold; the hind limb being extended along the body, the tibiotarsal articulation reaches the anterior border of the eye; the hind limbs being flexed vertically to body axis, the heels do not meet; limbs short and stout; skin above finely granular; below coarsely granular, especially the posterior aspect of femur.

Color.—Light or dark gray, with dorsal markings symmetrically arranged (cf. plate); beneath clear white; a sharp dark bar from posterior margin of eye over tympanum always present; heels and posterior aspect of tarsus dark brown, sharply defined; a black dot on each side of vent; also a dark streak along posterior aspect of thigh. Rather uniform in coloration.

Measurements.—Total length, tip of snout to vent, 17.5 mm.; width of head, 6.5 mm.; length of fore limb, 7.5 mm.; length of hind limb, from vent to tip of longest toe, 24 mm.

Having found, in a recent collection from Colombia, a Cryptobatrachus that appeared distinct from the Santa Marta Mountain specimens presented to the Museum of Comparative Zoölogy by the Museum of Zoölogy of the University of Michigan, I sent it to my friend Dr. A. G. Ruthven for examination. He and his colleague, Mrs. Gaige, have very kindly compared our example with their fine material from Santa Marta, and agree that this specimen seems to represent a distinct form. They point out, and very correctly, that it would be desirable to examine Peracca's type, which came from Guaca (altitude 1600 meters) in the Cordillera Central of Colombia. It is by no means impossible that it is the Santa Marta material which needs naming. This comparison cannot now be made, and therefore it seems desirable to indicate that there is another form in western Colombia. Dr. G. K. Noble states that Cryptobatrachus is a pure synonym of Hyloscirtus Peters, but I incline to consider this as unproved, following Dr. Ruthven.

The new form may be called:

Cryptobatrachus incertus, sp. nov.

Type.—No. 11616, Museum of Comparative Zoölogy, from Sonsón (altitude 2545 meters), Dept. of Antioquia, Colombia. From the Rev. Brother Nicéforo Maria, of the College of La Salle, Bogotá.

Diagnosis.—Similar to *C. fuhrmanni*, but with skin above strongly granular, belly and thighs more granular, throat likewise granular, not smooth. The coloration also is different.

Description.—Male, sexually well developed: tongue round, unemarginate; vomerine teeth in a straight row behind choanae, the two series nearly contiguous; nostril much nearer tip of snout than eye; upper eyelids wider than interorbital space; tympanum distinct but small, about one-third diameter of eye; discs of fingers and toes large, grooved about the inferior margin and usually with a groove along the diameter as well; disc of first finger smallest; first finger shorter than second; discs of toes all large; toes fully webbed; subarticular tubercles poorly developed; small inner metatarsal tubercle present; tibio-tarsal articulation reaching far beyond tip of snout when hind limb is extended forward; heels overlapping when legs are folded vertically to body axis; skin above granular; a glandular fold over tympanum, continued dorsolaterally to sacral region; belly, throat, and hinder aspect of thighs coarsely granular.

Color (alcoholic specimen).—Above dark slate color; sides marbled; throat and belly pinkish white, faintly clouded with dusky; thighs (inside) marbled and flecked; a light spot beneath eye on lip; two other faint light spots on lip margin between subocular spot and tip of snout.

Measurements.—Tip of snout to vent, 47 mm.; width of head, 20.5 mm.; diameter of eye, 7.5 mm.; diameter of tympanum, 2.5 mm.; foreleg from axilla, 35 mm.; hind leg from vent, 86 mm.

EXPLANATION OF PLATES.

Plate 12. *Phyllomedusa nicefori*, sp. nov., type (No. 11611, M. C. Z.). Fig. 1, dorsal view; fig. 2, ventral view.

Plate 13. *Bufo dunni*, sp. nov. Fig. 1, male, paratype (No. 11077, M. C. Z.); fig. 2, female, type (No. 11076, M. C. Z.).

Plate 14. Eleutherodactylus persimilis, sp. nov. Type, upper left-hand figure (No. 11598, M. C. Z.).